

AMENDMENTS TO THE CLAIMS

Please cancel claims 18-19 and 26 without prejudice or disclaimer.

1-21. (Canceled)

22. (Previously Presented) A method for producing a light-emitting semiconductor device of a group III nitride compound, comprising:

forming an N-layer of an N-type conduction, said N-layer comprising gallium nitride;

forming an emission layer of a group III nitride compound semiconductor satisfying the formula, $\text{Al}_{x1}\text{Ga}_{y1}\text{In}_{1-x1-y1}\text{N}$, where $0 \leq x1 \leq 1$, $0 \leq y1 \leq 1$, and $0 \leq x1 + y1 \leq 1$, on said N-layer;

forming a P-layer of a P-type conduction, on said emission layer, said P-layer comprising aluminum gallium nitride satisfying the formula, $\text{Al}_{x2}\text{Ga}_{1-x2}\text{N}$, where $0 < x2 < 1$; and

forming a contact layer of a P-type conduction, on said P-layer, said contact layer comprising gallium nitride;

forming a hole and a groove extending from said contact layer to said N-layer;

forming a first electrode on a top surface of said contact layer; and

forming a second electrode on an upper exposed surface of said N-layer in said hole.

23. (Previously Presented) The method for producing a light-emitting semiconductor device according to claim 22, wherein said emission layer is doped with acceptor and donor impurities.

24. (Previously Presented) The method for producing a light-emitting semiconductor device according to claim 22, wherein said contact layer of said P-type conduction is formed between said P-layer and an electrode.

25-26. (Canceled)